

### **REMARKS**

Claims 1-18, 24-27, and 32-34 are now pending in the application. While Applicants disagree with the current rejections, Applicants have amended the claims to expedite prosecution. Applicants reserve the right to pursue the claims as originally filed in one or more continuing applications. Support for the amendments can be found throughout the written description, claims, and drawings as originally filed. Therefore, no new matter has been added. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 103**

Claims 1-11, 24-27, and 32-34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Reitan (U.S. Pat. No. 5,600,574) in view of Leffel (U.S. Pub. No. 2005/0057303 A1).

Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Reitan (U.S. Pat. No. 5,600,574) in view of Takane (U.S. Pub. No. 2002/0030751).

These rejections are respectfully traversed.

I. Claim 1 recites that, based on the transfer function, the sample inputs are distributed so that more sample inputs are associated with a first region of the transfer function than a second region of the transfer function.

*A. Reitan does not show, teach, or suggest that, based on a curvature of the transfer function, the sample inputs are distributed so that more sample inputs are associated with a first region of the transfer function than a second region of the transfer function.*

In rejecting claim 1, the Examiner alleges that Reitan discloses "an image may contain a broad range of densities...where just a specific region of interest can be chose[n] to be the specific interest of densities wanted...Then the look up table is fixed...to take the majority of samples on that specified region." (See Page 2 of the Office Action mailed January 30, 2009). In support, the Examiner cites Column 16, Lines 6-10 and Column 18, Lines 20-25.

Applicants respectfully submit that neither these cited portions nor any other portion of Reitan appears to disclose selecting a specific region of interest based on a curvature of a transfer function as claim 1 recites. Instead, Reitan discloses regions of interest in the actual image "defined within bar spacing regions so that the region of interest stays completely within these features." (See Column 18, Lines 20-30). In other words, Reitan discloses locating a specific region of the image to be sampled and populating a look up table accordingly. In contrast, claim 1 requires distributing sample inputs based on the curvature of a transfer function.

Applicants respectfully submit that Reitan is absent of any teaching or suggestion of this limitation.

Accordingly, claim 1, as well as its dependent claims, should be allowable for at least the above reasons.

*B. Leffel and Takane do not show, teach, or suggest that, based on a curvature of the transfer function, the sample inputs are distributed so that more sample inputs are associated with a first region of the transfer function than a second region of the transfer function.*

The Examiner merely relies on Leffel and Takane to disclose an address module to calculate an index into the LUT based on image data, and a sensor, respectively. Although Applicants do not concede that Leffel and Takane disclose these limitations, Applicants respectfully submit that Leffel and Takane fail make up for the deficiencies of Reitan with respect to the recitation that, based on a curvature of the transfer function, the sample inputs are distributed so that more sample inputs are associated with a first region of the transfer function than a second region of the transfer function.

*C. Independent Claim 11 and Dependent Claims 2-10 and 12-18*

Independent claim 11 is allowable for at least similar reasons as claim 1. Dependent claims 2-10 and 12-18 ultimately depend from claims 1 and 11 and are therefore allowable for at least similar reasons. Applicants' position with respect to claims 2-10 and 12-18 should not be understood as implying that

no other reasons for the patentability of claims 2-10 and 12-18 exist. Applicants reserve the right to address these other reasons at a later date if needed.

II. Claim 24 recites using a first section of the received image data to identify a region of the input range of the transfer function to which the received image data belongs, selecting a second section of the received image data based on the identified region, and addressing an entry of a look-up table (LUT) using the first and second sections of the image data.

*A. Reitan does not show, teach, or suggest using a first section of the received image data to identify a region of the input range of the transfer function to which the received image data belongs, and selecting a second section of the received image data based on the identified region.*

The Examiner alleges that Reitan "shows look up tables used to transform...pixel quantities, where calibration, adaptation and various representations can be achieved by fixing the look up table to do most of the sampling on a specified region...the lookup table is fixed to take the majority of samples on that specified region of interest leaving the other region not chosen as the second region with less samples." (See Page 3 of the Office Action mailed January 30, 2009). Nonetheless, Applicants respectfully submit that the Examiner fails to provide any

support for the allegation that Reitan discloses using a first section of the received image data to identify a region of the input range of the transfer function to which the received image data belongs, and selecting a second section of the received image data based on the identified region.

For example, it is unclear which feature of Reitan allegedly corresponds to "using a first section of the received image data to identify a region of the input range of the transfer function to which the received image data belongs." The Examiner appears to rely on the allegation that Reitan discloses "a broad range of densities where just a specific region of interest can be chosen" corresponds to identifying a region of the input range of the transfer function. Applicants respectfully submit that merely specifying a region of interest of an image is not analogous to identifying a region of an input range of a transfer function that the received image data belongs to, and the Examiner fails to provide any indication which portion of Reitan corresponds to this structure.

Further, claim 24 recites selecting a second section of the received image data based on the identified region. In other words, the region of the input region of the transfer function is identified for the received image data, and then a second section of the same received image data is selected based on the identified region. In contrast, as best understood by

Applicants, the Examiner appears to allege that "the second region with less samples" corresponds to the second section of the received image data. Applicants respectfully submit that the second section as claim 24 recites is a second section of the same received image data that belongs to the identified region of the transfer function. In other words, the second section does not refer to a second region of the image. Accordingly, this structure is in direct contrast to the alleged second region of Reitan, which corresponds to different, non-specified region of the image.

Accordingly, claim 24, as well as its dependent claims, should be allowable for at least the above reasons.

*B. Independent Claim 32 and Dependent Claims 25-27 and 33-34*

Independent claim 32 is allowable for at least similar reasons as claim 24. Dependent claims 25-27 and 33-34 ultimately depend from claims 24 and 32 and are therefore allowable for at least similar reasons. Applicants' position with respect to claims 25-27 and 33-34 should not be understood as implying that no other reasons for the patentability of claims 25-27 and 33-34 exist. Applicants reserve the right to address these other reasons at a later date if needed.

*C. Dependent Claims 12-18*

Claim 12-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Reitan (U.S. Pat. No. 5,600,574) in view of

Takane (U.S. Pub. No. 2002/0030751) and further in view of Leffel (U.S. Pub. No. 2005/0057303). This rejection is respectfully traversed.

Applicants respectfully note that claims 12-18 depend directly or indirectly from claim 11 and are therefore allowable for at least similar reasons as claim 11. Applicants' position with respect to Claims 12-18 should not be understood as implying that no other reasons for the patentability of claims 12-18 exist. Applicants reserve the right to address these other reasons at a later date if needed.

## CONCLUSION

It is believed that all of the stated grounds of rejection have been properly addressed. For all of the reasons set forth above, Applicants submit that the application is in condition for allowance. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. By addressing particular positions taken by the Examiner in the above remarks, Applicants do not acquiesce to other positions that have not been explicitly addressed. In addition, Applicants' arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

If the Examiner believes that personal communication will allow any outstanding issues to be resolved, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By: \_\_\_\_\_



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